

Division of Marine Fisheries

Shellfish Rehabilitation Report

2010 Annual Report



Each year, the Division of Marine Fisheries (DMF) is required to report to the Joint Legislative Commission on Seafood and Aquaculture on the purchases and expenditures of the state's Shellfish Rehabilitation Program. 2010 marked the 14th year of operation under the revised Shellfish Rehabilitation Program.

Clutch Planting Activities - Oyster shell and marl are "planted" in coastal waters identified as prime shellfish-growing areas to promote oyster growth and enhance habitat. Continued competition for oyster shells reduced the amount of shell procured for the 2010 season. The request to purchase #4 limestone marl was delayed and shipment of 154,222 bushels of marl did not arrive until after the 2010 planting season. This marl will be used in the 2011 season.

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| • Cultch Material (purchase and transportation) | \$ 233,618.72 |
| • Salaries and personnel | \$ 855,044.08 |
| • Operations, support equipment, and sampling programs | \$1,154,429.01 |
| TOTAL PROGRAM EXPENDITURES | \$2,243,091.81 |
| • Purchased oyster shells | 153,480 bushels |
| • Recycled oyster shells | 9,145 bushels |
| TOTAL CULTCH PLANTED | 162,625 BUSHELS |

Oyster Sanctuaries – Sanctuaries are created by building reefs on previously viable oyster producing sites. Reefs are constructed with a combination of natural oyster shell and/or Class B rip-rap marl. These reefs serve as habitat that attract native oyster larvae, as well as clams, juvenile finfish, crabs and marine organisms, which in turn attract larger fish, enhancing hook-and-line fishing. Harvest of oysters and the use of bottom disturbing gear are prohibited in the sanctuaries, allowing a brood stock of oysters to develop. Spawn from this brood stock is carried by tides throughout North Carolina's coastal waters, enhancing oyster populations.

Currently, there are 10 oyster sanctuaries located in estuarine waters from Dare to Carteret counties. This is the third year of operation under the expanded appropriated Oyster Sanctuary Program.

CRFL Coastal Fishing Reef/Oyster Sanctuary

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| • Purchase 9,000 tons Class B rip rap | \$ 339,750.00 |
| • Deployments Dec. 2009 – Sept. 2010 | 60 mounds |

Oyster Shell Recycling – The DMF collects oyster shells from individuals, businesses and festivals and places them back overboard on oyster sanctuaries and hand-harvest areas to help rebuild oyster stocks. These shells, which were considered trash, or were used for landscaping purposes, now go back into our coastal waters to help produce more oysters.

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| • Restaurant donations (73 participating businesses) | 9,562 bushels |
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| Public donations (127 recycle locations) | 8,289 bushels |
| • Festivals | 1,885 bushels |
| TOTAL SHELLS COLLECTED | 19,736 BUSHELS |
| • 2009 Tax Credits (44 businesses/three individuals) | 12,616 bushels |

Expenditures

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| • Public outreach and education | \$11,428.07 |
| • Operations: (includes fuel, signage, equipment, maintenance, shell collection cans, materials to build collection bins and travel) | \$21,410.08 |

TOTAL PROGRAM EXPENDITURES **\$32,838.15**

American Recovery and Reinvestment Act - Approximately \$5 million in funds were obtained by the N.C. Coastal Federation to enhance DMF oyster sanctuaries and cultch planting sites. Fishermen were paid \$2 per bushel to transport and plant 41,700 bushels of shell to DMF-selected sites. Fishermen earned \$83,400 for this work.

- Crab Hole Oyster Sanctuary - 144 mounds were built by contractors
- Clam Shoal Oyster Sanctuary - 209 mounds were built by contractors

2011 Operations - The proposed enhancement activities will continue to incorporate the recommendations of the Oyster Fishery Management Plan as follows:

- The division will continue to hold and encourage participation in cultch planting meetings and incorporate input into enhancement activities to minimize effects of management actions. Efforts are proceeding to establish expanded hand harvest areas.
- The existing policy to limit the number of new planting sites to 30 per year in the northern area has been formalized and will continue to be utilized.
- The Oyster Shell Recycling Program will continue to expand to inland counties.
- The Oyster Sanctuary Program will continue by making deployments on existing and new oyster sanctuaries, monitoring existing sanctuary structures, and investigating new locations for program expansion.

Projected 2011 Expenditures:

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| • Materials: | |
| Cultch 294,900 bushels | \$ 435,554 |
| Rip rap 9,000 tons (CRFL Funded) | \$ 371,800 |
| • Salaries and personnel | \$1,032,347 |
| • Operations | \$2,605,971 |

TOTAL PROGRAM EXPENDITURES **\$4,445,672**